

**GRAZING MANAGEMENT PLAN
FOR THE EASTERN DUBLIN
GENERAL PLAN AMENDMENT AREA
CITY OF DUBLIN**

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GRAZING MANAGEMENT PLAN

Summary

The preparation of this grazing management plan was required by Mitigation Measure 3.7/4.0 of the EIR for the Eastern Dublin General Plan Amendment (GPA) and Specific Plan, which states, "*Grazing management plans shall be developed by the City and implemented soon after approval of the General Plan Amendment and Specific Plan. Management plans shall favor protection of riparian and wetland areas, increased plant diversity, and the recovery of native plants, in particular, perennial grasses.*"

Cattle and horses grazing along Tassajara Creek and major tributaries have reduced and degraded native habitat. Cattle and horse impacts to riparian resources and sensitive resources found at seeps and springs noted on Figures 3.7-A and 3.7-C of the EIR for the Eastern Dublin General Plan Amendment (GPA) and Specific Plan (attached) can be reduced through the implementation of selected improvements. Those improvements include:

- The development of alternate watering sources, salt blocks and nutrient dispensers strategically placed in upland, dry locations to greatly reduce the movement of cattle and horses into the riparian corridors along Tassajara Creek, major tributaries and springs and seeps;
- Limited areas of exclusionary fencing to protect sensitive species around springs and seeps and the arroyo willow riparian woodland area along Fallon Road.

Implementation of these measures will be negotiated through voluntary short-term agreements between the City of Dublin and landowners for those lands which will be rezoned and developed in the future. The provisions of the grazing management plan will be conditions for approval of rezones within the Eastern Dublin General Plan Amendment area, excluding the future study area (GPA) and will apply to those lands which will be zoned rural residential/agriculture or open space in the future.

Introduction

This grazing management plan was prepared concurrent with the Tassajara Creek Comprehensive Stream Restoration Program (Sycamore Associates, 1996) to fulfill the requirements of the EIR for the Eastern Dublin General Plan Amendment (GPA) and Specific Plan. The primary intent of this document is to ensure that significant riparian and wetland resources of Tassajara Creek and major tributaries in the GPA area are protected and enhanced, while allowing grazing to continue on properties along the creek and tributaries, consistent with the Specific Plan. This document is prepared with the understanding that cattle and horses have grazed this region and watered in the Tassajara Creek corridor for many decades, and that any efforts to integrate riparian protection and restoration must be done with the rancher's cooperation and land management expertise. Riparian protection and restoration measures must be practical and cost-effective while providing the means to protect sensitive environmental resources.

The preparation of this grazing management plan was required by the EIR for the Eastern Dublin General Plan Amendment (GPA) and Specific Plan. Its authority springs from the following element of the EIR for the Eastern Dublin General Plan Amendment (GPA) and Specific Plan and from policies of the Specific Plan that describe the City's intention to protect and enhance riparian resources.

Mitigation Measure 3.7/4.0 of the EIR for the Eastern Dublin General Plan Amendment (GPA) and Specific Plan states, *"Grazing management plans shall be developed by the City and implemented soon after approval of the General Plan Amendment and Specific Plan. Management plans shall favor protection of riparian and wetland areas, increased plant diversity, and the recovery of native plants, in particular, perennial grasses."*

The purpose of this grazing management plan is twofold:

- To ensure compliance with the EIR for the Eastern Dublin General Plan Amendment and Specific Plan which called for the preparation of grazing management plans;
- To provide land management recommendations to protect and enhance riparian and wetland resources, water quality and the habitats of sensitive plant and wildlife species.

This grazing management plan is based upon information in the Eastern Dublin General Plan Amendment (GPA) and Specific Plan and EIR, other documents cited in the references and personal communication with agency representatives and local ranchers.

Cattle and horses enter creeks to drink water, therefore development of alternate watering sites are a focus of this grazing management plan. Protection of sensitive biological resources and enhancement of riparian resources along Tassajara Creek, major tributaries and springs and seeps in the GPA area should be accomplished through:

- The development of alternate watering sources, salt blocks and nutrient dispensers strategically placed in upland, dry locations to greatly reduce the movement of cattle and horses into the riparian corridors along Tassajara Creek, major tributaries and springs and seeps;
- Limited areas of exclusionary fencing to protect sensitive species around springs and seeps and the arroyo willow riparian woodland area along Fallon Road.

Cooperative and voluntary protection of riparian and wetland resources are the basis of this grazing management plan. It is viewed as preferable to a regulated approach which would mandate costly protection measures, such as extensive fencing of the entire creek. Landowners and grazing lessees have the greatest familiarity with the lands and resources, the feasibility and the practical consequences of alternative practices. The motivation for this approach is underscored by Program 6H of the Eastern Dublin General Plan Amendment (GPA) and Specific Plan (page 67) which directs the City of Dublin to enact and enforce an erosion and sedimentation control ordinance to protect water quality and protection of stream channels. Successful implementation of the lower cost measures described herein to discourage cattle and horse use of sensitive biological resource areas, Tassajara Creek, and major tributaries would reduce the need for provisions in the soil

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erosion and sediment control ordinance focusing on cattle and horse impacts to water quality and soil erosion.

For the purpose of this document, minor tributaries are defined as grassy swales devoid of shrub and tree vegetation, and major tributaries are defined as tributaries that support shrubs and trees or are in close proximity to ponds, seeps or springs. The major tributaries addressed in this grazing management plan are shown on Figures 3.7-A and 3.7-C of the EIR for the Eastern Dublin General Plan Amendment (GPA) and Specific Plan.

This grazing management plan does not address in detail technical range management issues such as residual dry matter, the control of exotic plants, range analysis, rest, or grazing capacity, focusing instead on the means to protect the creek and wetland resources.

Area Covered by Grazing Plan

This grazing plan covers all areas within the Eastern Dublin General Plan Amendment area, excluding the future study area (hereinafter referred to as the GPA) that are currently being grazed or will be grazed by domestic livestock in the future. Lands located outside the City limits shall not be subject to this grazing plan.

Grazing has been a traditional land use throughout the region for decades. However, as development in the Eastern Dublin GPA area proceeds, lands that currently support cattle and horses will be converted to the land uses described on Figure 2B (Land Use Map, Eastern Dublin General Plan Amendment (GPA) and Specific Plan) of the Specific Plan. As described in the Specific Plan, future grazing within the Eastern Dublin GPA area will be restricted to those areas zoned rural residential/agriculture or open space.

Rural Residential/agricultural Zone

Lands which will ultimately be zoned rural residential/agriculture within the Eastern Dublin GPA area are in two disconnected areas which are not immediately adjacent to Tassajara Creek. The smaller area would generate only a small amount of forage for cattle or horses, supporting only a very limited herd year round, or a larger herd for a short period of time. This small area is surrounded by land zoned medium density and community park and is bounded on the west by Tassajara Road. When the park is developed the boundary between it and the rural residential/agriculture land should be fenced to prevent the movement of cattle or horses into park facilities. Once fenced, livestock will be unable to move out of the area into Tassajara Creek or sensitive resources along tributaries. The larger area that is zoned rural residential/agriculture, while not adjacent to Tassajara Creek is bisected by tributaries to Tassajara Creek, one of which supports red-legged frog at the location mapped on Figures 3.7-A and 3.7-C (Habitat and Sensitive Species, EIR for Eastern Dublin General Plan Amendment (GPA) and Specific Plan). Movement of cattle or horses from this area to the creek will be prevented by fencing along Fallon Road and fencing around residential development to the south.

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Open Space Zone

For the purposes of this grazing plan, all lands to be zoned open space within the Eastern Dublin GPA area in the future are divided into five areas, featured as OS 1 through 5 on the attached Figure 2B. The accessibility of these areas to Tassajara Creek, riparian resources along major tributaries, and seeps and springs is described below. The grazing management guidelines in this grazing plan were developed to reduce impacts of cattle and horses on riparian resources along Tassajara Creek, major tributaries, and sensitive species at seeps and springs within the areas designated as OS 1 through 5.

OS 1 Livestock will be contained within OS 1, unable to move to Tassajara Creek if the boundary with Camp Parks to the west is fenced and if fencing or other development barriers occur at the northern boundary of OS 1.

OS 2 and 3 These properties occur in narrow bands along Tassajara Creek. If livestock grazing in these areas occurs in the future, livestock would have to be concentrated along the creek because access to upland areas would be blocked by development and fencing along the Camp Parks boundary.

OS 4 Movement of livestock from OS 4 into Tassajara Creek will be blocked by fencing along Tassajara Creek Road. Sensitive resources at seeps and springs along the major tributary to Tassajara Creek do not occur within this property.

OS 5 Fallon Road crosses a major tributary that occurs within this area. While development will surround this area, arroyo willow riparian woodland does occur along the margins of the tributary.

Phased Implementation of the Grazing Management Plan

Grazing may continue within the Eastern Dublin GPA until the landowner receives a zone change approval, tentative map approval and grading permit consistent with land uses noted on Figure 2B of the Eastern Dublin General Plan Amendment (GPA) and Specific Plan. Compliance with this grazing management plan will be made a condition of rezone or tentative map approval. After approval of zoning changes, grazing will be restricted to those more limited areas which will be zoned rural residential/agriculture or open space.

Implementation of this grazing management plan should begin upon acceptance by the City of Dublin for all areas currently being grazed within the Eastern Dublin GPA area. Discussions with landowners should be held to discuss this grazing management plan and to determine the need or desirability of a cooperative watershed management group to expedite these improvements.

The cost of developing alternate watering sources (specified in this management plan) and extensive exclusionary fencing (not specified in this management plan) can be very high, and in the case of landowners who do not anticipate continuing grazing in the future, such improvements may be infeasible. In addition, if grazing is to be phased out with

development, grazing-related impacts will be reduced and implementation of new grazing management measures may not be necessary. The City of Dublin should anticipate negotiating voluntary agreements with individual landowners in these situations to ensure that grazing impacts to riparian resources, and sensitive resources at springs and seeps do not continue beyond an agreed upon period of time. Guidelines 1-2, and 4-9 from the "Grazing Management Guidelines" section below should be implemented as soon as possible. Guideline 3, which will restrict access of open space-zoned lands along Tassajara Creek to cattle, should be implemented concurrent with development of the northern portion of the Eastern Dublin GPA area.

Ultimately, the elements of the grazing management plan will be focused on the properties zoned rural residential/agriculture and open space noted on Figure 2B Land Use Map of the Eastern Dublin General Plan Amendment (GPA) and Specific Plan. Alternate watering sources and limited exclusionary fencing to protect Tassajara Creek, major tributaries, and seeps and springs will be required only if cattle or horses are being grazed on those lands.

Grazing Management Goals

The goals are guided by EIR Mitigation Measure 3.7/4.0 for the protection and enhancement of native biological resources. Goals cover the following general areas of resource protection: riparian area protection, protection of sensitive species, recovery of native plant cover, fire hazard management, prevention of soil erosion or degradation of soil resources, water quality protection, and wildlife protection from rodenticide impacts. Management measures used to achieve these goals can include grazing, water source development, fencing, integrated pest management, and/or habitat protection and restoration.

Grazing shall be conducted consistent with the goals described below.

Grazing Management Goal 1 : Riparian habitat along Tassajara Creek and major tributaries will be protected from excessive grazing in the future. Livestock impacts on riparian vegetation, water quality and soil erosion will be reduced from current levels..

Grazing Management Goal 2 : Adverse impacts from grazing to habitats or populations of sensitive wildlife and plant species including known occurrences and potential habitat for the red-legged frog will be minimized in the future.

Grazing Management Goal 3 : Fire hazards may be managed through the appropriately timed rotation of domestic livestock which will consume vegetative material likely to develop into significant fire hazards.

Grazing Management Goal 4: Soil erosion within the Tassajara Creek corridor, major tributaries and seeps and springs will not be exacerbated by cattle and horse grazing in the future.

Grazing Management Goal 5: Adverse impacts to water quality in the Tassajara Creek corridor, major tributaries, seeps and springs associated with cattle and horse grazing will be reduced in the future.

Grazing Management Goal 6: Native plant cover, including perennial grasses and native plant diversity in riparian and wetland areas will be protected from excessive grazing through the development of alternate watering sources in upland locations away from known occurrences of sensitive plant species.

Grazing Management Goal 7: Local wildlife will not suffer adverse impacts from the use of rodenticides used in ranching operations to control ground squirrels.

ROLES AND RESPONSIBILITIES

City of Dublin Role

The City of Dublin will be responsible for enforcing implementation of this grazing plan. Landowners shall be required to comply with this grazing plan as conditions of rezone or tentative map approval. The City has no control over lessees except through the property owners. In cases where property owners are not applying for rezone or tentative map approvals, the City would ask the property owners and lessees to voluntarily enter into an agreement to adopt measures consistent with this grazing plan. The City of Dublin should initiate discussions with landowners and grazing lessees watering cattle or horses along Tassajara Creek or major tributaries to review this grazing plan with the goal of developing alternate watering sources and exclusionary fencing.

Should landowners wish to pursue a cooperative watershed management group, the City of Dublin should take a leadership role in the formation and management of the group, working with landowners and grazing lessees, East Bay Regional Parks District, Alameda County Resource Conservation District, and the Farm Services Agency.

The City of Dublin will be able to enforce the provisions of this grazing management plan during review of applications for rezone and tentative map applications. Applications could be denied if not in compliance with the grazing management plan.

The City of Dublin should work with Camp Parks staff to ensure that the fences along the Camp Parks border that abuts the Eastern Dublin GPA area are maintained to keep livestock within Camp Parks boundaries.

Monitoring of this grazing plan by the City of Dublin will be required, and is described below in the section on Monitoring and Evaluation Standards.

Landowner Responsibilities: Cooperative Watershed Management Group and/or Individual Landowner Implementation

Landowners who graze livestock within the Eastern Dublin GPA area will be responsible as conditions of project approval for implementing the measures described herein to protect riparian resources and seeps and springs. Should landowners wish to secure assistance developing alternate watering sources, a cooperative watershed management group among ranchers, grazing lessees, the City of Dublin, East Bay Regional Parks District, Alameda County Resource Conservation District, and the Farm Services Agency should be instituted. City of Dublin staff would facilitate formation of the group and lead meetings. Alternatively, should landowners who graze cattle and horses on lands adjacent to Tassajara Creek, major tributaries or seeps and springs prefer to independently develop alternate water sources and protect sensitive biological resources without any cost-sharing assistance, there may be no need for such a watershed management group. Cooperation with a watershed management group would be voluntary, but the protections described below in the guidelines will be required whether ranchers work with the group or prefer to work independently.

Focus of Cooperative Watershed Management Group

If instituted, the focus of the group should be on the development of alternate water and nutrient sources, and their location away from riparian areas along Tassajara Creek, major tributaries and sensitive resources at springs and seeps. Other issues could include pest management, soil conservation, restoration of native plants, and enhancement of native wildlife populations.

Technical and Funding Assistance

The Natural Resources Conservation Service (formerly known as the Soil Conservation Service) can provide technical assistance, while the Farm Services Agency administers the Agriculture Conservation Program cost-sharing program. Cost-sharing assistance for landowners may be available through the Agricultural Conservation Program (ACP), administered by the Farm Services Agency for developing watering troughs away from springs or seeps, or pumping water from the creek. The Natural Resources Conservation Service can offer technical assistance, and already has extensive contacts with the ranching community. A watershed-based cooperative approach between interested parties would facilitate the acquisition of cost-sharing funds and/or a grant for implementing improvements. Management of such a group is time-consuming however. If a watershed management group is formed, the City of Dublin should anticipate taking a lead in its formation and management. A longer lead time is now required to get cost-sharing grants and a watershed approach with multiple cooperators is preferred by the disbursing agency.

GRAZING MANAGEMENT GUIDELINES

Grazing generates income, reduces fire hazard, and helps retain the rural ambiance of the area. Recognizing the intensification of use anticipated by the Specific Plan, the adaptations of

grazing practices described in this document will be needed to meet the expectations of ranchers, the City of Dublin and future residents of the area.

Grazing within the Eastern Dublin GPA area should be consistent with the goals described above and the guidelines developed in this section. This section describes grazing management guidelines that will help ensure the resource protection required by the Specific Plan.

Protection of Riparian Areas, Springs and Seeps

Cattle and horses need watering sources, but left uncontrolled, can damage riparian and wetland vegetation, cause soil disturbance, degrade water quality, reduce the limited area of this critically important habitat area, and reduce the value of riparian, spring and seep habitats.

Tassajara Creek, major tributaries, and the seeps and springs featured on Figure 3.7-A of the EIR for the Eastern Dublin General Plan Amendment (GPA) and Specific Plan are critically important in supporting wildlife and wetland vegetation given the hot, dry, rainless summers of the region. These water sources increase the habitat value of the surrounding area for wildlife, and provide habitat for plant and animal species that require aquatic habitat or a wetland environment for all or part of their life stages. The red-legged frog populations and areas of native vegetation noted on Figures 3.7-A and 3.7-C are largely dependent on the wetland and riparian resources of the area, particularly deep pools that hold water year-round. To protect these resources, cattle and horse watering should be shifted away from the creek, major tributaries, and seeps or springs to troughs in upland locations, if possible. There is evidence in the literature that cattle even prefer drinking from a trough to a stream (Clawson, 1993). Supplemental feeding stations in upland locations will also reduce cattle and horse use of the creek, tributaries, seeps and springs. Development of alternate watering sources can only occur if sufficient water is available however. There may be cases where the development of alternate water sources is infeasible because of water scarcity. Landowners and the City of Dublin will have to negotiate solutions in these situations.

Guideline 1: Watering troughs and nutrient dispensers should be developed in upland locations above the top of banks of Tassajara Creek and major tributaries throughout the Eastern Dublin GPA area where livestock grazing currently occurs adjacent to the Tassajara Creek, major tributaries, springs or seeps.

Watering troughs should be fed by lines regulated by shut-off valves to prevent any overflow of the troughs or excess drainage of the springs or seeps. Gravity flow pipeline systems should be installed, as needed, to transport water from wells, isolated springs or seeps, or pool areas along dry creeks to storage sites outside of the riparian area. In some cases, a pump may be required to fill troughs where large grade differences occur. Sufficient water should remain to protect wetland values when a water source is developed to accommodate grazing animals.

Guideline 2: Exclosures should be constructed to protect wetland areas and their ecotones (i.e. the transition between habitats) around the springs, seeps, and spring-fed ponds where grazing occurs. These exclosures should be gated to allow for the option of limited springtime

strongly recommend that the City of Chicago should consider the following options:

Option 1: The City of Chicago should consider the following options:

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Option 9: The City of Chicago should consider the following options:

grazing, to keep surrounding vegetation from becoming weedy and rank. Gates shall be closed to cattle and horses during the late springtime to keep wetland vegetation from being grazed heavily when adjacent hillsides begin to dry. Alternate sources of drinking water for grazing animals should be provided outside of the enclosed area. Exclosures must not present barriers to wildlife. Three to five-strand barbed wire fences are compatible with wildlife passage. Hog wire could be used if wild pigs are a problem in the area, but hog wire would impede the passage of native wildlife and is therefore less preferable than barbed wire.

Guideline 3: Livestock grazing in open space areas OS 2 and 3 (discussed above in “Area Covered by Grazing Plan”, and graphically represented on attached Figure 2B) should be discontinued when adjacent development occurs in the future because access to upland forage would be eliminated, and all livestock use would be concentrated within the riparian area. Movement of livestock into OS 2 from lands to the north of the Eastern Dublin GPA area should be prevented through the installation of limited exclusionary fencing. Ownership and management options for these areas are explored in the Eastern Dublin Comprehensive Stream Restoration Plan (Sycamore Associates, 1996).

Guideline 4: Livestock grazing should be excluded from the arroyo willow riparian woodland along the Fallon Road tributary through the installation of exclusionary fencing.

Management of Rare, Threatened, Endangered, and Sensitive Plants

No rare or endangered plants were found during field surveys for the EIR. The alkali springs are sufficiently degraded to merit no special protection from grazing, but may be considered as mitigation sites for future development.

Wildlife Habitat Protection

Plant communities are not static but change in reaction to climate, fire, drought, plant competition, and other events. Wildlife communities change in response to changes in the plant community. Wildlife species native to this region evolved with these plant communities, and developed preferences for various successional stages. Some species are adapted only to certain habitat conditions, and when those conditions disappear, so do dependent wildlife species.

Known occurrences of sensitive wildlife species within the areas to be zoned rural residential/agriculture or open space in the Eastern Dublin GPA area include: golden eagle nest on northeastern tributary, raptor nests, red-legged frog populations east of Tassajara Creek, and potential kit fox den sites. Grazing is not incompatible with the protection of the golden eagle or raptor nests, therefore livestock need not be excluded from the areas adjacent to these nests. Kit fox surveys conducted during the preparation of the EIR failed to detect the presence of kit fox but potential den sites were found (see Figure 3.7-C). Because grazing is compatible with kit fox habitat, no exclusionary fencing is needed.

Guideline 5: Exclusionary fencing shall be installed around the known locations of red-legged frog populations on tributaries in the northeast portion of the Eastern Dublin GPA area. Exclosures shall be gated to allow the option of limited springtime grazing to keep surrounding

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vegetation from becoming weedy and rank. Exclosures must not present barriers to native wildlife. Three to five-strand barbed wire fences are compatible with wildlife passage and should be used. Gates shall be closed to cattle and horses during the late springtime to keep wetland vegetation from being grazed heavily when adjacent hillsides begin to dry.

Fire Hazard Reduction

Grazing can be used to significantly reduce the volume and height of fuels in the Eastern Dublin GPA area's non-native grasslands. Fuel loads can be optimally managed through the determination of carrying capacity and close monitoring of stocking numbers, timing and duration of grazing. Fuel levels can be managed, and the goal is to leave the optimal amount to protect soil resources and assure grass stocking for the following year. Stock rotation however, requires the availability and feasibility of alternate range. The most significant sources of ignition lie along Tassajara and Fallon roads. Cattle and horse grazing in the rural residential/agriculture and open space areas adjacent to these roads will reduce fuel loads.

Guideline 6: Excessive fuel loads in rural residential/agriculture and open space areas adjacent to Tassajara and Fallon roads can be managed by cattle and horse grazing. Optimal herd sizes, timing and rotation can be determined using the information provided in the Forest Service Range Environmental Analysis Handbook (1984) and the East Bay Regional Parks District Wildland Management Policies and Guidelines (1992).

Soil Erosion and Water Quality Protection

Cattle and horse use of Tassajara Creek, major tributaries, seeps and springs will be greatly reduced through the development of alternate watering sources, and with exclusionary fencing around springs and seeps. Reducing cattle and horse use of the creek will serve to protect water quality as well as reduce soil erosion along livestock tracks down into the creek. The protection measures described in Guideline 1 above will serve to protect water quality and reduce soil erosion.

Native Plant Cover

Native plant cover along Tassajara Creek, tributaries, seeps and springs will be protected by the development of alternate watering sources and limited exclusionary fencing. These measures are described in Guideline 1. Restoration plantings are discussed in the Eastern Dublin Comprehensive Stream Restoration Plan (Sycamore Associates, 1996).

Range Forage Utilization

The amount of mulch or residual dry matter (dead plant matter, RDM) remaining in any one year can influence plant productivity and plant composition the following growing season. Low amounts of mulch tend to favor the growth of undesirable plants (Heady 1956, Hooper and Heady 1970). An optimum mixture of desirable plant species results on non-native grassland where 600 to 800 pounds per acre are left (Pitt and Heady 1978, Bartolome et al. 1980). Too much mulch results in a thatch, which inhibits new plant growth (Clawson and McDougald 1982). In general, more mulch is needed in steep areas than on flat land. Plant cover is another important variable that needs consideration.

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Guideline 7: Forage utilization by grazing animals should be managed by landowners to assure that appropriate amounts of RDM remain on the ground at the end of the season. Various residual mulch guidelines exist for different sites in the California annual grassland type (Clawson and McDougald 1982, U.S. Forest Service 1984).

In general, four to six inches of standing vegetation should remain at the end of the grazing season. Individual areas may have special circumstances that require that additional mulch remain. Residue requirements will vary according to the need to promote soil stability, maintain plant productivity, or protect wildlife habitat. Plant cover should be sufficient to minimize bare areas subject to erosion.

Supplemental Feeding

In fall and early winter domestic livestock are often unable to consume enough forage to meet their nutritional needs. This deficiency may be offset by feeding grains, molasses, or hay. During the late winter and spring, an adequate diet of all the essential nutrients, with the possible exception of salt and certain minerals, can be obtained from the natural forage. Forage quality follows a declining trend as the seasons progress, and further supplementation is often necessary. In order to minimize cattle and horse impacts on riparian and wetland resources, supplemental feeding stations should be located in upland locations away from these areas.

Guideline 8: Supplemental feeding of cattle and horses, if needed, should be provided outside of the riparian buffer along Tassajara Creek, major tributaries and away from the wetland areas around springs and seeps.

Rodenticide and Herbicide Use

Rodenticides are known to harm native wildlife, including carnivores and other non-target species, especially raptors and kit fox. Furthermore, the squirrel populations that are often the target of rodenticide poisoning are beneficial to many native wildlife species of the region, including kit fox, burrowing owl, red legged frog and California tiger salamander. Program 6N of the Eastern Dublin General Plan Amendment (GPA) and Specific Plan stipulates that "The use of rodenticides and herbicides within the project area should be restricted to avoid impacts on wildlife. The City of Dublin shall require any poisoning programs to be done in cooperation with and under supervision of the Alameda County Department of Agriculture."

Guideline 9: To protect wildlife populations and habitat, the use of rodenticides within the project area should be restricted. Ground squirrels should be controlled by trapping and shooting or accepted integrated pest management (IPM) procedures and practices consistent with other City of Dublin regulations. Landowners are encouraged to assess the extent of pest infestations and define the actual threat prior to initiating a control program. The use of herbicides to control noxious weeds should be consistent with label precautions.

MONITORING

Monitoring by the City of Dublin

Through discussions with landowners and grazing lessees, the City should negotiate voluntary agreements for the installation of watering troughs, supplemental feeding stations and exclusionary fencing around springs and seeps consistent with this grazing management plan. Compliance with the grazing management plan will be conditions for rezone and tentative map approval.

The City of Dublin will conduct annual site checks to determine whether watering troughs have been developed and are functionally maintained, and if exclusionary fencing around springs, seeps and red-legged frog locations has been installed, is being adequately maintained, and if management of limited springtime grazing is protecting the wetland resources. Should any measures agreed upon by the City of Dublin and landowners or the cooperative watershed management group be inadequately implemented, the City of Dublin should send a letter to the responsible landowner, asking that corrective measures be taken to ensure compliance with the grazing management plan and the individual timetable and agreement between the City and the landowner.

City staff should also develop a working agreement with the Natural Resources Conservation Service, the Alameda County Resource Conservation District or a private consultant to monitor the condition of the vegetation in the riparian buffer along Tassajara Creek, tributaries and springs and seeps in areas being grazed. Adjustments in the location of supplemental feeding stations or the need for additional exclusionary fencing should be developed with the technical assistance available through these parties.

General Plan
-Eastern Extended Planning Area
LAND USE MAP

Legend

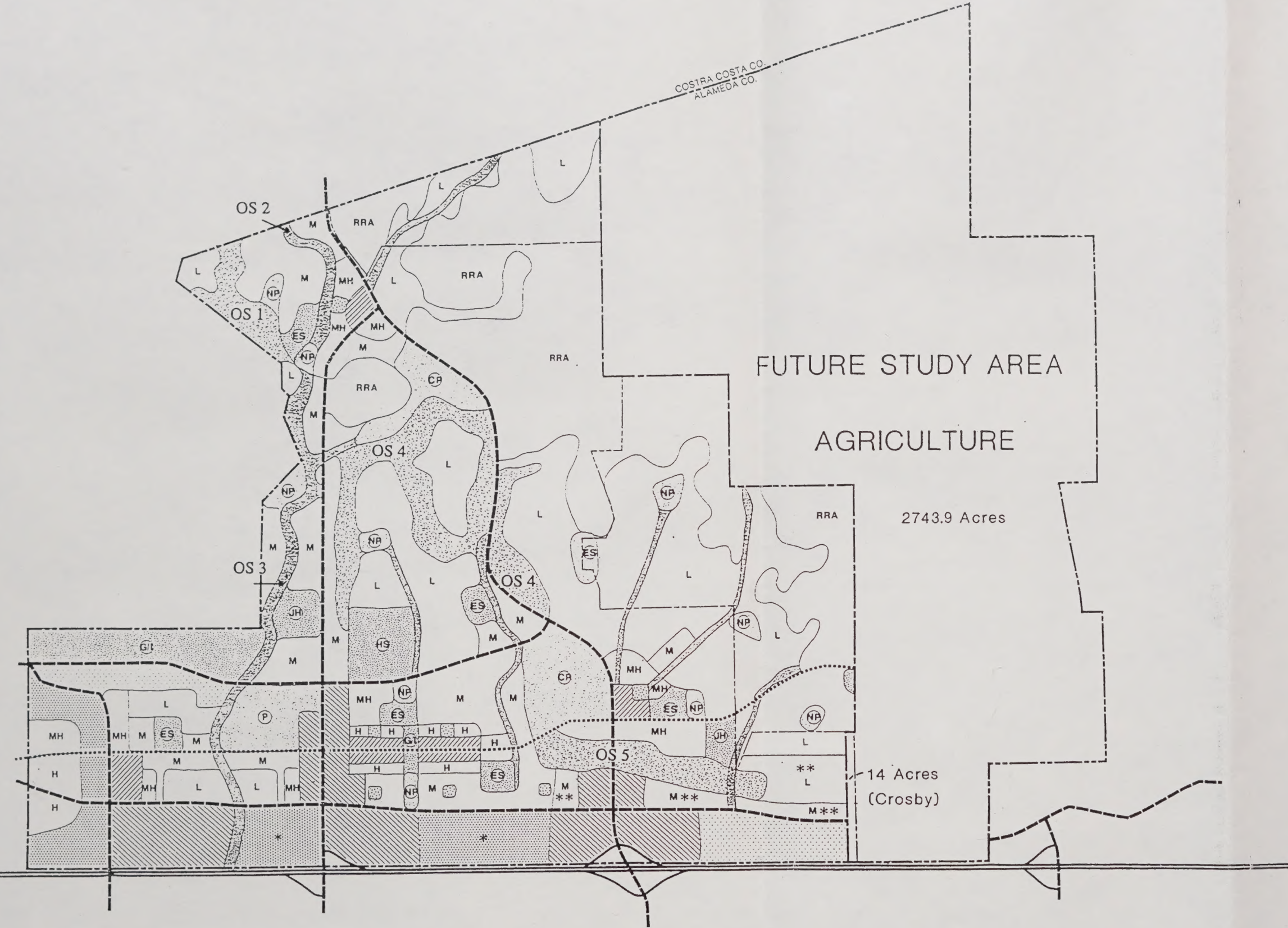
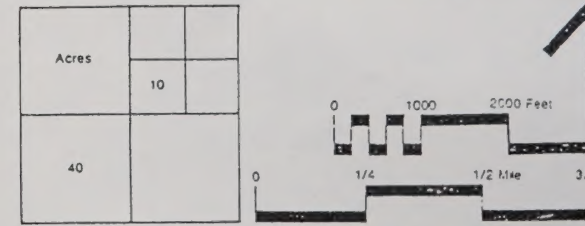
- COMMERCIAL
- Neighborhood Commercial
 - General Commercial
 - Campus Office
 - Industrial Park
- RESIDENTIAL
- H High Density 25- du/ac
 - MH Medium-High Density 14-25 du/ac
 - M Medium Density 6-14 du/ac
 - L Low Density 0-6 du/ac
 - RRA Rural Residential/Agriculture 1 du/100 ac
- PUBLIC/SEMI-PUBLIC/OPEN
- Public/Semi-Public Facility
 - ES Elementary School
 - JH Junior High School
 - HS High School
 - GP Public/Semi-Public
 - Parks & Recreation
 - P City Park
 - CP Community Park
 - NP Neighborhood Park
 - Neighborhood Square
 - Open Space
 - Stream Corridor (Will be designated as open space)
- CIRCULATION
- Arterial Street
 - Collector Street
 - Transit Spine
 - SOI Boundary
 - General Plan Amendment Study Area
 - Specific Plan Study Area

EASTERN DUBLIN

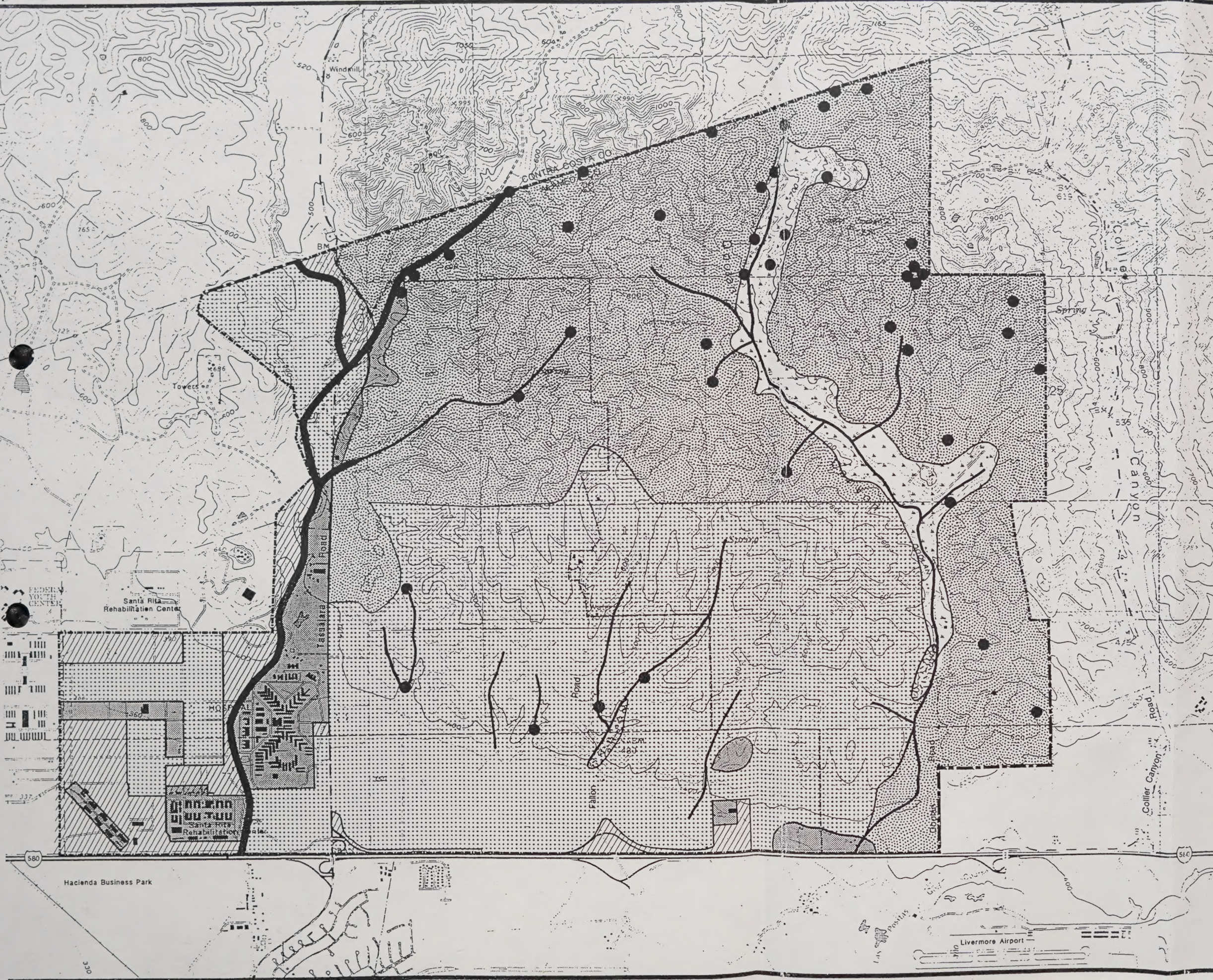
May 10, 1993

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Figure 2B



* General Commercial may be permitted by a Planned Development Zoning Process (see text for complete discussion)
** Will convert to Future Study Area/Agriculture where determined inconsistent with APA (see text for complete discussion)



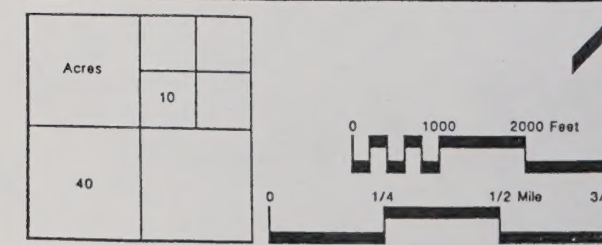
Habitat

Legend

- General Plan Amendment Area
- Specific Plan Area
- Developed
- Northern Riparian forest
- Non-native grassland
- Dry-farming rotational cropland
- Intermittent streams
- Alkalai grassland
- Arroyo willow riparian woodland
- Ruderal field
- Freshwater marsh
- Springs, seeps, Stock tanks and ponds

EASTERN DUBLIN GPA • SP • EIR

Wallace Roberts & Todd Figure 3.7 - A



Sensitive Species

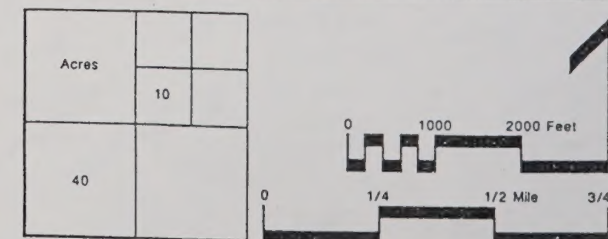
Legend

- General Plan Amendment Area
- Specific Plan Area
- Red tailed hawk or other raptor nest
- Golden eagle nest
- Western pond turtle location
- Red legged frog location
- Potential kit fox dens
- Approximate area searched for San Joaquin kit fox dens



EASTERN DUBLIN GPA • SP • EIR

Wallace Roberts & Todd Figure 3.7 - C



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REPRINTS

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